

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all parent versions, and listing, of claims in this application:

1-17. (Cancelled).

18. (Currently Amended) An apparatus for measuring a thickness of a heart wall, comprising:

a member having a distal end configured to be positioned adjacent a heart wall;  
[[and]]

an indicator disposed proximate a distal end of the member and adapted to indicate a measurement corresponding to the thickness of the heart wall without the indicator penetrating the heart wall; and

a device configured to form a passage in the heart wall based on the measurement corresponding to the thickness of the heart wall.

19. (Currently Amended) The apparatus of claim 18, wherein the ~~member further includes a device~~ [[that]] extends from the distal end of the member to penetrate the heart wall.

20. (Previously Presented) The apparatus of claim 19, wherein the device includes a sensing mechanism for determining a displacement of a tip of the device into the heart wall.

21. (Previously Presented) The apparatus of claim 18, wherein the member includes a catheter.

22. (Previously Presented) The apparatus of claim 18, wherein the indicator includes at least one transducer.

23. (Previously Presented) The apparatus of claim 22, wherein the indicator includes a first transducer for transmitting a pressure wave and a second transducer for sensing a reflected pressure wave.

24. (Previously Presented) The apparatus of claim 18, wherein the indicator is on the distal end of the member.

25. (Currently Amended) The apparatus of claim 18, wherein the indicator is ~~slidably disposed in~~ inserted through a lumen defined by the member.

26. (Currently Amended) The apparatus of claim 18 ~~[[19]]~~, wherein the device includes a laser.

27. (Currently Amended) The apparatus of claim 18 ~~[[19]]~~, wherein the device includes a drill.

28. (Previously Presented) The apparatus of claim 18, wherein the indicator is coupled to an analyzer for determining the thickness of the heart wall.

29. (Previously Presented) The apparatus of claim 18, wherein the indicator is coupled to an ultrasonic frequency generator.

30. (Currently Amended) A method for measuring a thickness of a heart wall, comprising:

providing a member having a distal end and an indicator disposed proximate a distal end of the member;

positioning the distal end of the member adjacent a heart wall; ~~[[and]]~~

using the indicator to make a measurement corresponding to the thickness of the heart wall without penetrating the heart wall with the indicator; and

forming a passage in the heart wall based on the measurement corresponding to the thickness of the heart wall.

31. (Previously Presented) The method of claim 30, wherein the indicator includes at least one transducer.

32. (Previously Presented) The method of claim 30, wherein the using step includes transmitting a pressure wave and sensing a reflected pressure wave.

33. (Previously Presented) The method of claim 30, further comprising analyzing the measurement to determine the thickness.

34. (Previously Presented) The method of claim 33, wherein the analyzing includes analyzing a reflected pressure wave.

35. (Previously Presented) The method of claim 30, further comprising extending a device from the member and penetrating the heart wall with the device.

36. (Previously Presented) The method of claim 35, further comprising sensing the displacement of a tip of the device into the heart wall.

37. (Previously Presented) The method of claim 30, wherein providing the member includes disposing the indicator on a distal end of the member.

38. (Currently Amended) The method of claim 30, wherein providing the member includes inserting ~~slidably disposing~~ the indicator ~~[[in]]~~ through a lumen defined by the member.

39. (Previously Presented) The method of claim 30, further comprising positioning the indicator adjacent the heart wall.

40. (Previously Presented) The method of claim 39, wherein the positioning includes sliding the indicator relative to the member.

41. (Previously Presented) A method for treating a heart, comprising:  
positioning a distal end of an instrument proximate to a heart wall;  
measuring a thickness of the heart wall; and  
creating a passage in the heart wall via the instrument, the passage being disposed at an angle with respect to a perpendicular to the heart wall at a location on the heart wall corresponding to the position of the distal end of the instrument.

42. (Previously Presented) The method of claim 41, wherein the surface of the heart wall includes an endocardial surface.

43. (Previously Presented) The method of claim 41, wherein the creating includes creating a plurality of passages disposed at an angle with respect to a perpendicular to the heart wall.

44. (Previously Presented) The method of claim 41, wherein creating the passage includes terminating the passage in the heart wall.

45. (Previously Presented) The method of claim 41, wherein the passage is formed by a recess.

46. (Previously Presented) The method of claim 41, wherein the creating includes one of drilling and lasing to form at least part of the passage.

47. (Previously Presented) A method for supplying the blood to the heart, comprising:

measuring a thickness of a heart wall;

forming a recess in the heart wall based on the measured thickness; and

directing blood to the heart wall via the recess.

48. (Previously Presented) The method of claim 47, further comprising supplying the blood to be directed to the heart wall from a heart chamber.

49. (Previously Presented) The method of claim 48, wherein the heart chamber is a left ventricle.

50. (Previously Presented) The method of claim 47, wherein the directing of blood includes directing the blood at an angle to a perpendicular to the heart wall at a location where the recess is formed.

51. (New) An apparatus for measuring a thickness of a heart wall, comprising:  
a member having a distal end configured to be positioned adjacent a heart wall;  
and

an indicator disposed proximate a distal end of the member and adapted to indicate a measurement corresponding to the thickness of the heart wall without the indicator penetrating the heart wall,

wherein the member further includes a device that extends from the distal end of the member to penetrate the heart wall.

52. (New) The apparatus of claim 51, wherein the device includes a sensing mechanism for determining a displacement of a tip of the device into the heart wall.

53. (New) The apparatus of claim 51, wherein the indicator is inserted through a lumen defined by the member.

54. (New) The apparatus of claim 51, wherein the indicator is configured to measure the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall.

55. (New) An apparatus for measuring a thickness of a heart wall, comprising:  
a member having a distal end configured to be positioned adjacent a heart wall;  
and

an indicator disposed proximate a distal end of the member and adapted to indicate a measurement corresponding to the thickness of the heart wall without the indicator penetrating the heart wall,

wherein the indicator is inserted through a lumen defined by the member.

56. (New) The apparatus of claim 55, wherein the member further includes a device that extends from the distal end of the member to penetrate the heart wall,

wherein the device includes a sensing mechanism for determining a displacement of a tip of the device into the heart wall.



57. (New) The apparatus of claim 55, wherein the indicator is configured to measure the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall.

58. (New) An apparatus for measuring a thickness of a heart wall, comprising:  
a member having a distal end configured to be positioned adjacent a heart wall;  
and

an indicator disposed proximate a distal end of the member and adapted to indicate a measurement corresponding to the thickness of the heart wall without the indicator penetrating the heart wall,

wherein the indicator is configured to measure the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall.

59. (New) The apparatus of claim 58, wherein the member further includes a device that extends from the distal end of the member to penetrate the heart wall,

wherein the device includes a sensing mechanism for determining a displacement of a tip of the device into the heart wall.

60. (New) The apparatus of claim 18, wherein the indicator is configured to measure the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall.

61. (New) A method for measuring a thickness of a heart wall, comprising:  
providing a member having a distal end and an indicator disposed proximate a distal end of the member;  
positioning the distal end of the member adjacent a heart wall;  
using the indicator to make a measurement corresponding to the thickness of the heart wall without penetrating the heart wall with the indicator; and  
extending a device from the member and penetrating the heart wall with the device.

62. (New) The method of claim 61, further comprising sensing the displacement of a tip of the device into the heart wall.

63. (New) The method of claim 61, further comprising inserting the indicator through a lumen defined by the member.

64. (New) The method of claim 61, wherein the measurement corresponds to the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall.

65. (New) A method for measuring a thickness of a heart wall, comprising:

providing a member having a distal end and an indicator disposed proximate a distal end of the member;

positioning the distal end of the member adjacent a heart wall; and

using the indicator to make a measurement corresponding to the thickness of the heart wall without penetrating the heart wall with the indicator; and

inserting the indicator through a lumen defined by the member.

66. (New) The method of claim 65, further comprising extending a device from the member and penetrating the heart wall with the device; and

sensing the displacement of a tip of the device into the heart wall.

67. (New) The method of claim 65, wherein the measurement corresponds to the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall.

68. (New) A method for measuring a thickness of a heart wall, comprising:

providing a member having a distal end and an indicator disposed proximate a distal end of the member;

positioning the distal end of a member adjacent a heart wall; and

using the indicator to make a measurement corresponding to the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall without penetrating the heart wall with the indicator.

69. (New) The method of claim 68, further comprising extending a device from the member and penetrating the heart wall with the device; and  
sensing the displacement of a tip of the device into the heart wall.

70. (New) The method of claim 30, wherein the measurement corresponds to the thickness of the heart wall at a predetermined angle with respect to a perpendicular of the heart wall.